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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/605,696	06/28/2000	Angus O. Dougherty	1759CIP/USW0577 PUS	6861
22193 7590 08/17/2007 QWEST COMMUNICATIONS INTERNATIONAL INC LAW DEPT INTELLECTUAL PROPERTY GROUP 1801 CALIFORNIA STREET, SUITE 3800 DENVER, CO 80202			EXAMINER RYMAN, DANIEL J	
			ART UNIT 2616	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

09/605,696

Applicant(s)

DOUGHERTY ET AL.

Examiner

Daniel J. Ryman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 10-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-46 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed 2 August 2007 have been fully considered but they are not persuasive. On page 11 of the Response, Applicant alleges that, since the Internet, i.e. the distributed network of Fluss, is already deployed, there is no reason to combine Gulliford with Fluss "to deploy the [Internet] in a manner that offers high bandwidth, rapid deployment, and incremental deployment costs." Examiner, respectfully disagrees that there is no reason to combine Gulliford and Fluss.
2. By asserting that the "Internet is already 'deployed,'" Applicant assumes that the configuration and size of the Internet is static. However, the Internet is constantly evolving as networks and computers are added to and removed from the Internet in light of the changing needs of the Internet's users. Thus, while a "core" of the Internet is already deployed, there still exists a need to deploy networks to connect new users to this "core." These new networks are, as broadly defined, the "Internet" since these networks are a part of the Internet.
3. In the present case, Fluss is not directed to existing infrastructure only, which at the very least suggests that Fluss's system is applicable to new infrastructure. When building new infrastructure employing Fluss's system (such as new headends), this new infrastructure requires a connection over a network, such as the Internet, to a data source, such as a web server, as taught by Fluss (Fluss: Fig. 1). However, Fluss never dictates how this network connection should be effectuated, other than suggesting that the network should be the "Internet."
4. Gulliford teaches connecting two devices by deploying a wireless network rather than "land-based communications technologies, which generally use either copper wire or optical

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fiber” (Gulliford: col. 36-40) since wireless networks offer high bandwidth, rapid deployment, and incremental deployment costs. Gulliford also teaches attaching wireless networks to the global Internet (Gulliford: col. 8, lines 15-22, see also col. 3, lines 55-58), thereby making the wireless network a part of the “Internet.” As such, Examiner maintains that it would have been obvious to one of ordinary skill in the art at the time of the invention to use a wireless network, as disclosed in Gulliford, to connect the headend of Fluss with the web server of Fluss since this offers high bandwidth, rapid deployment, and incremental deployment costs.

5. In addition, Examiner notes that Fluss never discloses that the network connecting the headend and the web server must be the Internet. Rather, Fluss implies that the Internet is only exemplary (See Fluss: col. 1, lines 6-11; col. 1, lines 62-66; and col. 2, lines 42-46). As such, the term “Internet” as used by Fluss merely stands for any communication network that can be used to enable communications between the web server and the headend. Thus, since the Internet is only exemplary, it would have been obvious to use any type of network to connect the headend and the web server.

6. Gulliford teaches that wireless networks offer high bandwidth, rapid deployment, and incremental deployment costs compared to “land-based communications technologies.”

Therefore, Examiner maintains that it would have been obvious to one of ordinary skill in the art at the time of the invention to use a wireless network, as disclosed in Gulliford, in the system of Fluss since such a network offers high bandwidth, rapid deployment, and incremental deployment costs.

7. In view of the foregoing, Examiner maintains that the claims are obvious in light of the cited prior art.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 10-14, 20-28, and 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fluss (USPN 6,304,578), of record, in view of Gulliford et al. (USPN 6,366,584), of record.

10. Regarding claims 10 and 36, Fluss discloses a method of and system for distributing high-speed information packets to at least one subscriber unit, each information packet associated with an information channel, the method comprising the steps of and the system comprising means for: routing each information packet through a distributed network of routing elements (col. 4, lines 25-31, where each packet is routed through routers, i.e. routing elements, in the internet, i.e. a distributed network); receiving each information packet in a distribution center in communication with the distributed network of routing elements (col. 4, lines 25-31, where a headend, i.e. a distribution center, receives the packets); and forwarding each information packet to each subscriber unit in communication with the distribution center and requesting the information channel of which the information packet is associated (col. 4, lines 32-41, where a router in the headend "routes queued data packets to the appropriate users of shared channel").

Fluss does not expressly disclose that each routing element is in wireless communication with at least one other routing element in the network of routing elements.

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Gulliford teaches, in a distributed routing network (col. 7, lines 61-63), connecting routing elements via wireless links (col. 7, line 61-col. 8, line 11, where the elements route traffic on to other nodes, i.e. the elements are “routers,” see also col. 13, lines 13-44) to enable high bandwidth, rapid deployment, and incremental deployment costs (col. 2, lines 40-col. 3, line 5, where, for example, “[w]ireless networks adapted according to the present invention can be deployed in a fraction of the time it takes to deploy in-ground based (copper, fiber, hybrid fiber/coaxial HFC, etc.) systems”). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have each routing element be in wireless communication with at least one other routing element in the network to deploy the distributed network in a manner that offers high bandwidth, rapid deployment, and incremental deployment costs.

11. Regarding claims 11 and 37, Fluss in view of Gulliford discloses that the information packets comprise video information (Gulliford: col. 2, lines 53-57, where video services require video packets).

12. Regarding claims 12 and 38, Fluss in view of Gulliford discloses that routing each information packet through a distributed network of routing elements comprises: routing each information packet through a distributed network of distribution points (col. 4, lines 25-31, where each packet is routed through a distributed network of routers, i.e. the internet, see also Gulliford: col. 7, lines 61-63, where each packet is routed through a distributed network); and transmitting each information packet to an access point operative to communicate with a plurality of subscriber units (Fluss: col. 4, lines 25-41, where the packets are transmitted to a headend, i.e. an access point operative to communicate with a plurality of subscriber units, see

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also Gulliford: col. 8, lines 22-25, where one routing node, i.e. access point, connects to a plurality of subscribers, such as 132A and 132B, see also col. 12, lines 32-35).

13. Regarding claims 13 and 39, Fluss in view of Gulliford discloses that at least one distribution point is functioning as the distribution center (Fluss: col. 4, lines 25-41, where the packets are transmitted to a headend, i.e. a distribution center, which includes a router, i.e. a distribution point, such that at least one distribution point functions as the distribution center, see also Gulliford: col. 8, lines 22-25, where one routing node, i.e. distribution point, connects to a plurality of subscribers, such as 132A and 132, such that it acts as a distribution center, see also col. 12, lines 32-35).

14. Regarding claims 14 and 40, Fluss in view of Gulliford discloses that at least one access point is functioning as the distribution center (Fluss: col. 4, lines 25-41, where the headend is an access point functioning as the distribution center, see also Gulliford: col. 8, lines 22-25, where one routing node, i.e. access point, connects to a plurality of subscribers, such as 132A and 132, such that it acts as a distribution center, see also col. 12, lines 32-35).

15. Regarding claim 20, Fluss discloses a system for providing high-speed packetized information comprising a distributed routing network (col. 4, lines 25-31, where each packet is routed through the internet, i.e. distributed routing network), the distributed routing network comprising a plurality of distribution points (col. 4, lines 25-31, where each packet is routed through routers, i.e. distribution points, in the internet), at least one of the plurality of distribution points comprising at least one host digital terminal (HDT) for converting high-speed information packets to an optical format and forwarding the information packets to subscriber units (col. 4, lines 32-41, where a router in the headend "routes queued data packets

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to the appropriate users of shared channel,” and col. 4, lines 45-49, where the routing is done over a hybrid fiber/coax (HFC) network, such that the headend, i.e. a host digital terminal, converts the packets to an optical format for forwarding to subscribers over a HFC network).

Fluss does not expressly disclose that each distribution point is in wireless communication with at least one other distribution point. Gulliford teaches, in a distributed routing network (col. 7, lines 61-63), connecting distribution points via wireless links (col. 7, line 61-col. 8, line 11, where the elements route traffic on to other nodes, see also col. 13, lines 13-44) to enable high bandwidth, rapid deployment, and incremental deployment costs (col. 2, lines 40-col. 3, line 5, where, among other things, “[w]ireless networks adapted according to the present invention can be deployed in a fraction of the time it takes to deploy in-ground based (copper, fiber, hybrid fiber/coaxial HFC, etc.) systems”). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have each distribution point be in wireless communication with at least one other distribution point to deploy the distributed network in a manner that offers high bandwidth, rapid deployment, and incremental deployment costs.

16. Regarding claim 21, Fluss in view of Gulliford does not expressly disclose that at least one subscriber unit is operative to receive information packets in an optical format; however, Fluss in view of Gulliford does disclose the use of hybrid fiber/coax networks to distribute the packets to the subscriber unit (Fluss: col. 4, lines 45-49). Examiner takes official notice that fiber to the curb (FTTC) is well known in the art as a way to extent the high speed fiber optical line all the way to the subscriber unit to provide the subscriber unit with the greater bandwidth offered by fiber. Therefore, it would have been obvious to one of ordinary skill in the art at the



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time of the invention to have the subscriber unit be operative to receive information packets in an optical format to permit the high-speed fiber optic line to be extended all the way to the subscriber unit.

17. Regarding claim 22, Fluss in view of Gulliford discloses at least one access point in communication with the at least one HDT, the access point operative to convert information packets in an optical format into a format compatible with copper cabling (Fluss: col. 4, lines 45-49, where the headend distributes the information over a hybrid fiber/coax (HFC) networks, wherein it is implicit that HFC networks contain nodes, i.e. access points, which convert the information from an optical format to a format compatible with copper cabling for distribution to the subscriber units).

18. Regarding claim 23, Fluss in view of Gulliford discloses that at least one subscriber unit is in communication with the at least one access point through a network interface device (Fluss: col. 4, lines 45-49, where the subscriber will receive the packets over the HFC network).

19. Regarding claim 24, Fluss in view of Gulliford suggests that at least one access point functions as a video distribution center (Fluss: col. 4, lines 45-49, where the headend distributes the information over a hybrid fiber/coax (HFC) networks, wherein it is implicit that HFC networks contain nodes, i.e. access points, which convert the information from an optical format to a format compatible with copper cabling for distribution to the subscriber units, and Gulliford: col. 4, lines 53-57, where video services are distributed, such that the access point is, as broadly defined, a "video distribution center," since it distributes video information received from the network).

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20. Regarding claim 25, Fluss in view of Gulliford discloses that high-speed packetized information is provided through a VDSL service (Fluss: col. 5, lines 2-8, esp. line 7).

21. Regarding claim 26, Fluss in view of Gulliford discloses that high-speed information includes video information (Gulliford: col. 2, lines 53-57, where video services require video packets).

22. Regarding claim 27, Fluss in view of Gulliford suggests that at least one distribution point functions as a video distribution center (Gulliford: col. 4, lines 53-57, where since video services are distributed throughout the network through the routers, i.e. distribution points, a distribution point is, as broadly defined, a “video distribution center,” since the router distributes video information).

23. Regarding claim 28, Fluss discloses a system for providing packetized information to a plurality of subscriber units comprising a distributed routing network (col. 4, lines 25-31, where each packet is routed through the internet, i.e. distributed routing network), the distributed routing network comprising a plurality of distribution points (col. 4, lines 25-31, where each packet is routed through routers, i.e. distribution points, in the internet), at least one of the plurality of distribution points functioning as a distribution center (col. 4, lines 32-41, where a headend “routes queued data packets to the appropriate users of shared channel,” i.e. it acts as a distribution center).

Fluss does not expressly disclose that each distribution point is in wireless communication with at least one other distribution point. Gulliford teaches, in a distributed routing network (col. 7, lines 61-63), connecting distribution points via wireless links (col. 7, line 61-col. 8, line 11, where the elements route traffic on to other nodes, see also col. 13, lines

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13-44) to enable high bandwidth, rapid deployment, and incremental deployment costs (col. 2, lines 40-col. 3, line 5, where, among other things, “[w]ireless networks adapted according to the present invention can be deployed in a fraction of the time it takes to deploy in-ground based (copper, fiber, hybrid fiber/coaxial HFC, etc.) systems”). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have each distribution point be in wireless communication with at least one other distribution point to deploy the distributed network in a manner that offers high bandwidth, rapid deployment, and incremental deployment costs.

Fluss does not expressly disclose that the information is video information or that the distribution center is a video distribution center. Gulliford teaches, in a distributed routing network (col. 7, lines 61-63), distributing video information to subscribers in the network (col. 4, lines 53-57). It is implicit that any distribution center that distributes video information to subscribers, as broadly defined, is a “video distribution center” since it distributes the video to the subscribers. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the information be video information and to have a distribution unit be a video distribution unit to permit a user to view video.

24. Claims 15-17, 19, 29, 30, 41-43, 45, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fluss (USPN 6,304,578), of record, in view of Gulliford et al. (USPN 6,366,584), of record, as applied to claims 10, 28, 31, and 36 above, and further in view of Lewis et al. (USPN 6,009,099), of record.

25. Regarding claims 15, 41, and 45, Fluss in view of Gulliford does not expressly disclose receiving a request from a subscriber unit to access an information channel; requesting

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transmission of the requested information channel if no other subscriber unit is receiving the requested information channel; and noting that the requesting subscriber unit is receiving the requested information channel. However, Fluss in view of Gulliford does disclose that the packets contain video information (Gulliford: col. 4, lines 53-57). Lewis teaches, in a video distribution network, receiving a request from a subscriber unit to access an information channel (col. 1, lines 52-63, where a user sends a request for an information channel); requesting transmission of the requested information channel if no other subscriber unit is receiving the requested information channel (col. 1, lines 52-63, where “[i]f the new video channel is authorized but not available, steps are performed such that the new video channel becomes available,” see also col. 2, lines 54-64); and noting that the requesting subscriber unit is receiving the requested information channel (col. 3, lines 4-9, where devices keep track of the number of units receiving an active channel). Lewis does this to decrease bandwidth requirements in a network for the efficient delivery of video information (col. 1, lines 26-31). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to receive a request from a subscriber unit to access an information channel; to request transmission of the requested information channel if no other subscriber unit is receiving the requested information channel; and to note that the requesting subscriber unit is receiving the requested information channel in the system of Fluss in view of Gulliford, as outlined in Lewis, since this decreases bandwidth requirements in a network for the efficient delivery of video information.

26. Regarding claims 16 and 42, Fluss in view of Gulliford in further view of Lewis implicitly discloses that receiving a request from a subscriber unit comprises determining that the requesting subscriber unit is within the coverage area of a distribution center (Fluss: col. 4,

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lines 33-41, where since the headend only distributes packets to user within its coverage area, the headend should only service requests that are intended for users within its coverage area).

27. Regarding claims 17 and 43, Fluss in view of Gulliford in further view of Lewis discloses that receiving a request from a subscriber unit comprises receiving a message from a subscriber unit (Lewis: col. 1, lines 55-57).

28. Regarding claims 19 and 46, Fluss in view of Gulliford in further view of Lewis discloses determining that a subscriber unit is no longer accessing the information channel (Lewis: col. 3, lines 6-12, where a device checks if devices are still using a channel); canceling transmission of the information channel if no other subscriber unit is receiving the information channel (Lewis: col. 3, lines 6-12, where a video channel that is not provided to any users is to be deleted); and noting that the subscriber unit is no longer receiving the information channel (col. 3, lines 6-12, where a device tracks which channels are being received).

29. Regarding claim 29, Fluss in view of Gulliford does not expressly disclose that at least one of the distribution points is operative to receive requests for video content from at least one subscriber unit and forward those requests to at least one video supplier. However, Fluss in view of Gulliford does disclose that the packets contain video information (Gulliford: col. 4, lines 53-57). Lewis teaches, in a video distribution network, that a distribution point is operative to receive requests for video content from at least one subscriber unit and forward those requests to at least one video supplier (col. 2, lines 56-64, where if a requested channel is not being received then the request is forwarded to a "video information provider," i.e. a video supplier). Lewis does this to decrease bandwidth requirements in a network for the efficient delivery of video information (col. 1, lines 26-31). Therefore, it would have been obvious to

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one of ordinary skill in the art at the time of the invention to receive requests for video content from at least one subscriber unit and forward those requests to at least one video supplier in the system of Fluss in view of Gulliford, as outlined in Lewis, since this decreases bandwidth requirements in a network for the efficient delivery of video information.

30. Regarding claim 30, Fluss in view of Gulliford does not expressly disclose that at least one video distribution center forwards video information packets comprising a video channel to each subscriber unit served by the video distribution center requesting the video channel.

However, Fluss in view of Gulliford does disclose that the packets contain video information (Gulliford: col. 4, lines 53-57). Lewis teaches, in a video distribution network, that at least one video distribution center forwards video information packets comprising a video channel to each subscriber unit served by the video distribution center requesting the video channel (col. 2, lines 15-23, where the video distribution center forwards "ATM cell based video information," i.e. video information packets, to the subscribers). Lewis does this to decrease bandwidth requirements in a network for the efficient delivery of video information (col. 1, lines 26-31). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have at least one video distribution center forwards video information packets comprising a video channel to each subscriber unit served by the video distribution center requesting the video channel in the system of Fluss in view of Gulliford, as outlined in Lewis, since this decreases bandwidth requirements in a network for the efficient delivery of video information.

31. Claims 18 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fluss (USPN 6,304,578), of record, in view of Gulliford et al. (USPN 6,366,584), of record, in further

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view of Lewis et al. (USPN 6,009,099), of record, as applied to claims 15 and 41 above, and further in view of Moriarty (USPN 6,052,744), of record.

32. Regarding claims 18 and 44, Fluss in view of Gulliford in further view of Lewis does not expressly disclose transmitting a dummy address as the destination for the requested transmission of the requested information channel. Moriarty teaches, transmitting a dummy address as the destination for the requested transmission of the requested information channel (col. 19, lines 53-67) since such a packet can be quickly discarded from the system. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to transmit a dummy address as the destination for the requested transmission of the requested information channel since such a packet can be quickly discarded from the system.

33. Claim 31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fluss (USPN 6,304,578), of record, in view of Gallagher (USPN 7,016,308), of record, in further view of Gulliford et al. (USPN 6,366,584), of record.

34. Regarding claim 31, Fluss discloses a system for providing packetized information to a plurality of subscriber units comprising: a distributed routing network (col. 4, lines 25-31, where each packet is routed through the internet, i.e. distributed routing network), the distributed routing network comprising a plurality of distribution points (col. 4, lines 25-31, where each packet is routed through routers, i.e. distribution points, in the internet); and at least one of the plurality of distribution points functioning as a distribution center (col. 4, lines 32-41, where a headend "routes queued data packets to the appropriate users of shared channel," i.e. it acts as a distribution center).

Fluss inherently discloses at least one access point in communication with the distributed routing network since Fluss discloses that the headend distributes the packets over a hybrid fiber/coax (HFC) network (col. 4, lines 45-49). For example, Gallagher teaches that in HFC networks, optical distribution nodes, i.e. access points, are used to convert the optical signals to electrical signals (col. 1, lines 18-30). As such, Fluss discloses at least one access point in communication with the distributed routing network.

Fluss does not expressly disclose that each distribution point is in wireless communication with at least one other distribution point. Gulliford teaches, in a distributed routing network (col. 7, lines 61-63), connecting distribution points via wireless links (col. 7, line 61-col. 8, line 11, where the elements route traffic on to other nodes, see also col. 13, lines 13-44) to enable high bandwidth, rapid deployment, and incremental deployment costs (col. 2, lines 40-col. 3, line 5, where, among other things, “[w]ireless networks adapted according to the present invention can be deployed in a fraction of the time it takes to deploy in-ground based (copper, fiber, hybrid fiber/coaxial HFC, etc.) systems”). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have each distribution point be in wireless communication with at least one other distribution point to deploy the distributed network in a manner that offers high bandwidth, rapid deployment, and incremental deployment costs.

Fluss does not expressly disclose that the information is video information or that the access point is a video distribution center. Gulliford teaches, in a distributed routing network (col. 7, lines 61-63), distributing video information to subscribers in the network (col. 4, lines 53-57). It is implicit that any access point that distributes video information to subscribers, as



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broadly defined, is a "video distribution center" since it distributes the video to the subscribers. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the information be video information and to have an access point be a video distribution unit to permit a user to view video.

35. Claims 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fluss (USPN 6,304,578), of record, in view of Gallagher (USPN 7,016,308), of record, in further view of Gulliford et al. (USPN 6,366,584), of record, as applied to claims 15 and 41 above, and further in view of Lewis et al. (USPN 6,009,099), of record.

36. Regarding claim 32, Fluss in view of Gallagher in further view of Gulliford does not expressly disclose that the at least one access point is operative to receive requests for video content from at least one subscriber unit and forward those requests to at least one video supplier. However, Fluss in view of Gallagher in further view of Gulliford does disclose that the packets contain video information (Gulliford: col. 4, lines 53-57). Lewis teaches, in a video distribution network, at least device is operative to receive requests for video content from at least one subscriber unit and forward those requests to at least one video supplier (col. 2, lines 56-64, where a request from a user is received and forwarded to the video information provider, i.e. video supplier, if the channel is not already being received). Lewis does this to decrease bandwidth requirements in a network for the efficient delivery of video information (col. 1, lines 26-31). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the at least one access point be operative to receive requests for video content from at least one subscriber unit and forward those requests to at least one

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video supplier in the system of Fluss in view of Gulliford, as outlined in Lewis, since this decreases bandwidth requirements in a network for the efficient delivery of video information.

37. Regarding claim 33, Fluss in view of Gallagher in further view of Gulliford does not expressly disclose that the at least one access point replicates video information packets comprising a video channel for each of a plurality of subscriber units requesting the video channel. However, Fluss in view of Gallagher in further view of Gulliford does disclose that the packets contain video information (Gulliford: col. 4, lines 53-57). Lewis teaches, in a video distribution network, replicating video information packets comprising a video channel for each of a plurality of subscriber units requesting the video channel (col. 2, lines 64-67, where multipoint transmissions involve replication of the information). Lewis does this to decrease bandwidth requirements in a network for the efficient delivery of video information (col. 1, lines 26-31). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the at least one access point replicate video information packets comprising a video channel for each of a plurality of subscriber units requesting the video channel in the system of Fluss in view of Gulliford, as outlined in Lewis, since this decreases bandwidth requirements in a network for the efficient delivery of video information.

38. Regarding claim 34, Fluss in view of Gallagher in further view of Gulliford does not expressly disclose that at least one access point is operative to receive a request to access a video channel from a subscriber unit; determine if the requested video channel is currently being accessed by another subscriber unit served by the access point; and if the requested video channel is not currently being accessed by another subscriber unit served by the access point, forwarding the request to a video supplier. However, Fluss in view of Gulliford does disclose

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that the packets contain video information (Gulliford: col. 4, lines 53-57). Lewis teaches, in a video distribution network, receiving a request to access a video channel from a subscriber unit (col. 1, lines 52-63, where a user sends a request for an information channel); determining if the requested video channel is currently being accessed by another subscriber unit served by the device (col. 3, lines 4-9, where devices keep track of the number of units receiving an active channel); and if the requested video channel is not currently being accessed by another subscriber unit served by the device, forwarding the request to a video supplier (col. 1, lines 52-63, where “[i]f the new video channel is authorized but not available, steps are performed such that the new video channel becomes available,” see also col. 2, lines 54-64). Lewis does this to decrease bandwidth requirements in a network for the efficient delivery of video information (col. 1, lines 26-31). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have the at least one access point be operative to receive a request to access a video channel from a subscriber unit; determine if the requested video channel is currently being accessed by another subscriber unit served by the access point; and if the requested video channel is not currently being accessed by another subscriber unit served by the access point, forwarding the request to a video supplier in the system of Fluss in view of Gulliford, as outlined in Lewis, since this decreases bandwidth requirements in a network for the efficient delivery of video information.

39. Regarding claim 35, Fluss in view of Gallagher in further view of Gulliford in further view of Lewis discloses that each of the at least one access point is further operative to receive a video information packet from at least one video supplier (Lewis: col. 2, lines 10-22, where the video information is received in an ATM cell, i.e. an information packet); determine if the

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received video packet corresponds to a video channel requested by more than one subscriber unit (Lewis: col. 2, lines 10-22, where ATM cells are provided to the requesting units); and forward the video packet to each subscriber unit requesting the video channel (Lewis: col. 2, lines 10-22, where ATM cells are provided to the requesting units).

### *Conclusion*

40. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (571)272-3152. The examiner can normally be reached on Mon.-Fri. 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571)272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Daniel J. Ryman  
Examiner  
Art Unit 2616

*Daniel Ryman*